

# Which Diagram to Use...

## Univariate Data: One set of data

| Qualitative data                                                                                                                                                                  | Discrete Data                                                                                                                                                                     | Continuous Data                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Tally chart</li> <li>Two-Way tables</li> <li>Pictograms</li> <li>Bar charts</li> <li>Pie Charts</li> <li>Stem and leaf diagrams</li> </ul> | <ul style="list-style-type: none"> <li>Tally chart</li> <li>Two-Way tables</li> <li>Pictograms</li> <li>Bar charts</li> <li>Pie Charts</li> <li>Stem and leaf diagrams</li> </ul> | <ul style="list-style-type: none"> <li>Two-Way tables</li> <li>Bar charts</li> <li>Pie Charts</li> <li>Frequency Polygon</li> <li>Histogram</li> </ul> |

## Comparisons: Two sets of *unpaired* data

| Qualitative data                                                                                      | Discrete Data                                                                                                            | Continuous Data                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Comparative Pie Charts</li> <li>Multiple Bar Charts</li> </ul> | <ul style="list-style-type: none"> <li>Comparative Pie Charts</li> <li>Multiple Bar Charts</li> <li>Box Plots</li> </ul> | <ul style="list-style-type: none"> <li>Comparative Pie Charts</li> <li>Multiple Bar Charts</li> <li>Population pyramid</li> <li>Box Plots</li> <li>Frequency Polygon</li> <li>Histograms</li> </ul> |

## Bivariate Data: Paired data sets

| Qualitative data | Discrete Data                                                                                   | Continuous Data                                                                                                      |
|------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| X                | <ul style="list-style-type: none"> <li>Scatter diagrams.<br/>(with line of best fit)</li> </ul> | <ul style="list-style-type: none"> <li>Time Series</li> <li>Scatter diagrams.<br/>(with line of best fit)</li> </ul> |